

**Patent claims**

1. A crosslinkable material based on organosilicon  
 5 compounds, characterized in that it contains  
 organosilicon compounds having quaternary ammonium  
 groups.

2. The crosslinkable material as claimed in claim  
 10 1, characterized in that it is one which contains  
 (A) organosilicon compound having at least two  
 condensable groups,  
 (B) organosilicon compound having at least one unit of  
 the formula

15 
$$-\text{SiR}^2_2-\text{R}^4-\text{N}^+\text{R}^3_2-\text{R}^4-\text{SiR}^2_2-\text{X}^- \quad (\text{II}),$$

in which  
 $\text{R}^2$  may be identical or different and have a meaning  
 20 stated below for R,  
 $\text{R}^3$  may be identical or different and are a monovalent,  
 optionally substituted hydrocarbon radical or may be  
 part of a bridging alkylene radical,  
 $\text{X}^-$  is an organic or inorganic anion,  
 25  $\text{R}^4$  is a divalent, optionally substituted hydrocarbon  
 radical which may be interrupted by heteroatoms, and  
 optionally  
 (C) a crosslinking agent.

30 3. The crosslinkable material as claimed in claim 1  
 or 2, characterized in that the organosilicon compounds  
 (A) used are those containing units of the formula

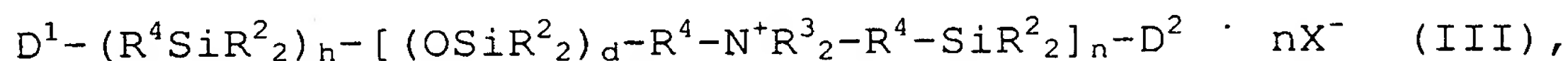
$$\text{R}_a(\text{OR}^1)_b\text{Y}_c\text{SiO}_{(4-a-b-c)/2} \quad (\text{I}),$$

35 in which

- 26 -

R may be identical or different and are optionally substituted hydrocarbon radicals which may be interrupted by oxygen atoms,  
 R<sup>1</sup> may be identical or different and are a hydrogen atom or monovalent, optionally substituted hydrocarbon radicals which may be interrupted by oxygen atoms,  
 Y may be identical or different and are a halogen atom or pseudohalogen radical, Si-N-bonded amine radicals, amide radicals, oxime radicals, aminoxy radicals and acyloxy radicals,  
 a is 0, 1, 2 or 3,  
 b is 0, 1, 2 or 3, and  
 c is 0, 1, 2 or 3,  
 with the proviso that the sum of a+b+c is less than or equal to 4 and at least two condensable radicals (OR<sup>1</sup>) are present per molecule.

4. The crosslinkable material as claimed in one or more of claims 1 to 3, characterized in that the organosilicon compounds (B) used are those of the formula



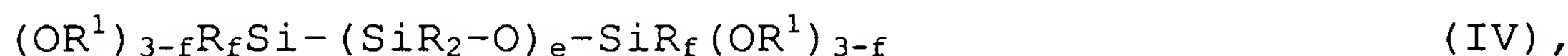
in which  
 D<sup>1</sup> is a hydrogen atom, hydroxyl radical, or halide radical, a radical -NR\*<sub>2</sub> or a monovalent organic radical, it being possible for R\* to be identical or different and R\* being a hydrogen atom or a monovalent, optionally substituted hydrocarbon radical and it also being possible for the radical -NR\*<sub>2</sub> to be present as an ammonium salt, and  
 D<sup>2</sup> is a group of the formula -(OSiR<sup>2</sup>)<sub>g</sub>-R<sup>4</sup><sub>k</sub>-D<sup>1</sup>, where R<sup>2</sup>, R<sup>3</sup>, D<sup>1</sup>, X<sup>-</sup> and R<sup>4</sup> have a meaning stated above  
 therefor, it being possible for the two radicals D<sup>1</sup> in each polymer molecule of the formula (III) to be identical or different, and

- 27 -

d is an integer from 1 to 200,  
h is 0 or 1,  
k is 0 or 1,  
g is a number from 0 to 1000 and  
5 n is an integer from 1 to 50.

5. The crosslinkable material as claimed in one or more of claims 1 to 4, characterized in that organosilicon compounds (B) have a viscosity of from  
10  $10^4$  to  $10^8$  mPa.s at 25°C.

6. The crosslinkable material as claimed in one or more of claims 1 to 5, characterized in that the organosilicon compounds (A) used are those of the  
15 formula



in which

20 R and  $\text{R}^1$  have the abovementioned meanings,  
e is from 30 to 3000 and  
f is 1 or 2.

7. The crosslinkable material as claimed in one or  
25 more of claims 1 to 6, characterized in that the material according to the invention is one which consists of

(A) organosilicon compounds containing units of the formula (I),

30 (B) organosilicon compound having at least one unit of the formula (II),

optionally

(C) crosslinking agent of the formula (V),

optionally

35 (D) catalyst,

optionally

(E) plasticizer,

- 28 -

optionally

(F) fillers,

optionally

(G) adhesion promoter and

5 optionally

(H) additives.

8. The crosslinkable material as claimed in one or  
more of claims 1 to 7, characterized in that the  
10 material according to the invention is one which  
consists of

(A) organosilicon compounds of the formula (IV),

(B) organosilicon compound of the formula (III),

optionally

15 (C) crosslinking agent of the formula (V),

optionally

(D) catalyst,

optionally

(E) plasticizer,

20 optionally

(F) fillers,

optionally

(G) adhesion promoter and

optionally

25 (H) additives.

9. A molding produced by crosslinking the  
crosslinkable material as claimed in one or more of  
claims 1 to 8.